

Final Meeting Notes: Community Advisory Group (CAG) - Aerojet Superfund Issues, November 20, 2013

Janis Heple, CAG Chair, began the meeting with Introductions at 7:00 p.m.

1. Introductions and Attendees

Attendees:

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|---------------------------------------------------------------------|---------------------------------------------------------------|
| Alex MacDonald (Regional Water Quality Control Board [RWQCB]) | Jessica Cooper (Recorder, Sullivan International Group, Inc.) |
| Blair Stone-Schneider (Skeo Solutions) | Jimmy Spearow (CAG) |
| Brit Snipes (City of Rancho Cordova) | Kevin Mayer (EPA) |
| Burt Hodges (Save the American River Association) | Nathan Schumacher (DTSC) |
| Cindy Chain-Britton (Department of Toxic Substances Control [DTSC]) | Paul Schubert (Golden State Water Company) |
| Chris Fennessy (Aerojet Rocketdyne) | Peter MacNicholl (DTSC) |
| Dan Waligora | Rick Bettis (Sierra Club and others) |
| Gary Riley (U.S. Environmental Protection Agency [EPA]) | Rodney Frake (Aerojet Rocketdyne) |
| George Waegell (Morrison Creek Group) | Stephen Green (Save the American River Association) |
| Jackie Lane (EPA) | Steven Ross (DTSC) |
| Janis Heple (CAG) | Tessa McRae (Sullivan International Group, Inc.) |
| | Tim Murphy (Aerojet Rocketdyne) |
| | Tom R. Gray (Fair Oaks Water District) |

The September 18, 2013 Draft Meeting Notes were finalized.

2. Aerojet Community Update – Tim Murphy, Aerojet Rocketdyne

Tim Murphy: An Aerojet Rocketdyne (“Aerojet”) employee was injured on the job and in serious condition. The Aerojet Fire Department first responders received great feedback and praise from Metro Fire. An investigation by the State of California Division of Occupational Safety and Health is pending.

Janis Heple: The story was published in the *Sacramento Bee* on November 19, 2013.

Question: Was there a chemical released into the ground or atmosphere?

Tim Murphy: It was a propellant burn fire and he is not aware of an improper release.

3. Aerojet Cleanup Updates – Gary Riley and Kevin Mayer, EPA

Kevin Mayer: Currently, the Agencies and Aerojet are evaluating the effectiveness of the groundwater system, which they have been doing for the past few years. This evaluation has been getting easier despite the large, complex system with over 2,000 monitoring wells. An additional 12 monitoring wells have been installed this past year as a result of our effectiveness evaluation at this time last year. We continue to evaluate the system and search for multiple lines of evidence to obtain more assurance of contaminant

delineation, whether that may be to evaluate if trichloroethylene (TCE), perchlorate, nitrosamines, or other contamination are fully under control.

Burt Hodges: Will there be more monitoring wells installed in the next year?

Kevin Mayer: Yes, there will be plans to install more monitoring wells this next year. We are moving towards an asymptotic state, and we are fine-tuning our understanding of the system; we are obtaining more in-depth resolution in those areas where we have questions of the effectiveness and to obtain more control over the source areas and areas of high concentrations.

Gary Riley: Mr. Mayer is focusing on the groundwater issues and plumes, and Mr. Riley is focusing on areas within the Aerojet boundary. The Proposed Plan for Boundary Operable Unit (OU) was released for public comment, and comments were submitted to the EPA in September 2013. EPA is currently reviewing those public comments and making changes for the Record of Decision. Mr. Riley indicated he is working on other areas as well, including Island OU. The DTSC, EPA, and RWQCB have been in discussions regarding the Island OU Remedial Investigation and have submitted comments on the draft RI report.

4. Inactive Rancho Cordova Test Site (IRCTS)—5-Year Review and the Groundwater Extraction Treatment (GET) F Sprayfield – Peter MacNicholl, DTSC

Mr. MacNicholl presented an Overview of Ongoing Activities at IRCSTS (see attachments with final minutes). The IRCSTS is a large 3,900-acre site, but only approximately 7% was used for site operations.

Janis Heple: Has that land been carved out?

Peter MacNicholl: Yes, and slated for redevelopment.

Question: Are there coordinates on the map in the presentation? In response, Mr.

MacNicholl pointed out where the main streets are located on the map for perspective.

Mr. MacNicholl presented the IRCSTS site history and discussed the 5-Year Review of the 2008 Remedial Action Plan for Soil and Groundwater. The goal of the 5-Year Review is to evaluate the remedy's protectiveness and how we are achieving the Remedial Action Objectives. Mr. MacNicholl discussed the Alpha Complex, Sigma Complex, and the GET F Sprayfield & Propellant Burn Area. He indicated extraction well operation and monitoring continues to protect the groundwater resources from contaminant plumes. The TCE plume is large and flowing southwest. The perchlorate flows more quickly in groundwater, resulting in a longer plume. Mr. MacNicholl showed the group the location of the extraction wells and also the production wells the group is trying to protect.

Janis Heple: It appears there is a stream of perchlorate along the runway; how is this being attacked?

Peter MacNicholl: There are extraction wells with piping installed back to the treatment system for when the plume reaches those wells on the south side of the runway

Mr. MacNicholl discussed the Rio Del Oro Development within IRCSTS land. The administration area (Security Park) is not planned for redevelopment. There will be

ongoing groundwater restoration for decades and the 5-Year Reviews will continue until needed.

Question: Perchlorate was monitored and detected since 1963. Has the monitoring well on Nut Plains Road contained detections of perchlorate?

Peter MacNicholl: There have been no detections of perchlorate in that well for a long while.

Question: There have been instances of cancer in children over the years near Old White Rock Road. Has EPA Method 521 been applied?

Mr. MacNicholl said he could not confirm the use of that method, but he would find out and follow up.

Question: Regarding GET F Sprayfield, was the 17,000 ppb detection of perchlorate a monitoring well sample or an effluent sample? Mr. MacNicholl responded it was a groundwater monitoring well sample.

Janis Heple: Is the cleanup goal for perchlorate 4 ppb? Mr. MacNicholl responded it is 4 ppb for the site.

Question: Are there high levels of perchlorate in areas slated for mining of dredge tailing piles? Mr. MacNicholl responded that mining will not be allowed in contaminated areas.

Question: Is the material from the contaminated site going to be used as imported fill and, if yes, this material can be exposed to sensitive receptors and this is a concern. How closely is this going to be monitored? Mr. MacNicholl indicated this will be monitored. He said the material is mostly cobbles and cobbles have little perchlorate. Perchlorate is a salt that will be washed out and it stays in the fines.

Question: Will there be exposure to this soil? Mr. Murphy indicated the material will be used as construction aggregate.

Question: Will there be restrictions on what they can use the aggregate for?

Tim Murphy: Yes.

Question: What is the contingency plan if there is contamination found during mining operations? Mr. MacNicholl responded that the areas with contamination have been identified and all proper precautions will be taken.

Question: Where will all the water from the "slickens" materials be disposed? Mr. Frice indicated that, in 2008, Granite Construction applied for the permit for mining that included the processing of the material. They process the material into crushed rock or aggregate base. The material is separated out and washed at their plant. Aerojet has removed tens of thousands of tons of contaminated material, which was properly disposed. If something is encountered, they are instructed to call and have the material removed properly.

Ms. Heple indicated she was not clear on what aspects were part of the 5-Year Review and Mr. MacNicholl indicated sites accounted for in the 2008 Remedial Action Plan will be the focus.

5. Preliminary Technical Assistance Needs Assessments (TANA) Findings – Blair Stone-Schneider, Skeo Solutions

Ms. Stone-Schneider indicated Skeo Solutions is a contractor for the EPA for technical assistance and working with community groups. The TANA was conducted and Skeo Solutions has interviewed about 20 people to obtain a big-picture view of community needs and what the CAG may need moving forward. She indicated Skeo Solutions has assisted the CAG through the OU 6 Proposed Plan public comment period and she briefly reviewed the results of the interview meetings and intends to discuss the next steps in January 2014. She highlighted the following four issues indicated in the interviews.

- 1) Formulate a list of concerns or interests on the site – prioritized list of interests that could help to best direct resources.
- 2) Need assistance for broader community outreach and education. There is little knowledge from the community outside of the CAG.
- 3) Need for cleanup process “big picture” such as the big picture time-line and the schedule for documents going through reviews, especially during non-meeting months. This includes more specific info from remedial investigation stage, on screening levels, and areas not retained for action.
- 4) Need for more information regarding stakeholder issues such as more information regarding chemicals of concern and risks, potential effects of groundwater contamination reaching the American River, and how groundwater contamination affects local water purveyor monitoring wells. Additionally, vapor intrusion issues in redeveloped areas, vapor mitigation technologies, and roles/requirements of property owners to maintain these systems.

Kevin Mayer: What is the outcome of the TANA and how might any of these needs be met?

Ms. Stone-Schneider indicated the TANA results will provide recommendations to the EPA and there will be opportunities to obtain more technical assistance through the Technical Assistance Services for Communities (TASC) program.

Kevin Mayer: The EPA is responsible to give the community information and the EPA will strive to give the community what they need.

Tim Murphy: Is this a quality control measure?

Jackie Lane: This is an independent, third-party look at the EPA’s outreach program.

Janis Heple: The CAG may have technical assistance when the OU 7 work is presented.

Question: Who might be responsible for community outreach in the future? For example, outreach for a homeowner of a property in a future development.

Mr. Riley responded that contracted support will be available to evaluate what information the community needs.

6. White Rock Dumps (WRD) 1 & 2 -- Past and Future – Cindy Chain-Britton, DTSC

Ms. Chain-Britton presented an overview of the past and future of WRD 1 and 2 (see attachments with final minutes). She discussed the WRD 1 and 2 locations, their history, and past investigations at each site. The Remedial Action Plan is a public document that

includes DTSC's decisions and recommendations, which have already started to be implemented. To close WRD 2, debris material will be excavated to industrial cleanup goals, and then the debris and contaminated soil will be transported to WRD 1. To close WRD 1, the WRD 1 and WRD 2 debris will be consolidated into a 3.8-acre closure area at WRD 1. A 4-foot-thick cap of native soil and gravel will be placed to cover the 3.8-acre closure area. All disturbed areas will be re-vegetated by hydro-seeding. Ms. Chain-Britton indicated the future Rio Del Oro Development incorporates WRD 1; it will be open space and park lands.

Question: What year did the dumps open?

George Wagell: WRD 1 opened in 1953 and WRD 2 operated for 6 months by Hazel Beebee. Note there were at least a dozen dumps in the area as well.

Question: Will both dumps have land use restrictions?

Statement: WRD 2 will be restricted to industrial use and WRD 1 will also be restricted. The cap at WRD 1 will be continually tested and maintained.

Question: Is there any infiltration or mitigation from contaminants of concern?

Statement: No, the landfill debris contained metal cans, glass bottles, and a lot of broken glass. There is no concern for leaching – the sites contained municipal waste.

Question: Why is the plan to consolidate the material from WRD 2 to WRD 1?

Statement: The plan is to move it to one location so we may worry about just one area.

7. Regional Board Aerojet Cleanup Overview – Alex MacDonald, RWQCB

Presentation notes and activities map were handed out (see attachments with final minutes).

Alex MacDonald: There are no changes in the GETs.

There have been new monitoring and extraction wells installed. AC12 is now called Extraction Well 4729. The groundwater summit with the regulatory agencies and Aerojet is currently underway today and tomorrow. We will evaluate the results since the previous groundwater summit last year and determine where we have control and where we need better control of the contamination. Our analysis this year will include the plans to be implemented in the upcoming year.

Kevin Mayer: This is leading to the 5-Year Review; we will conduct a formal review process for this in 2016.

Tom Gray: Does the evaluation during the groundwater summit take into account groundwater modeling data from the local water agencies?

Mr. MacDonald responded, yes, their data is inserted into our models. This includes pumping rates, quantities used, and other data.

Question: Does the modeling take into account a possible increase in water pumped by water purveyors in the future?

Mr. MacDonald responded, yes.

Mr. MacDonald discussed other areas and OUs, including Area 39 Open Space which was a part of Boundary OU and then moved to Island OU. Aerojet conducted an investigation at the site and south of the site, and Aerojet is drafting a report of their

findings. Aerojet is pilot-testing a treatment system to remove perchlorate from a groundwater spring prior to entering a nearby creek.

Question: Are the regulatory agency comments submitted to the stakeholders? Mr. MacDonald responded, no, but he can always send them if people are interested.

Question: Is the creek reaching waters of the State? Mr. MacDonald responded, no, the creek is considered waters of the State. The treatment system is in place to prevent that from happening. Aerojet collected surface water samples from the creek, and perchlorate was not detected.

Question: Have the Applicable or Relevant and Appropriate Requirements (ARAR) been implemented? Mr. MacDonald responded, yes, the RWQCB submits the ARARs for our requirements.

Question: Do the ARARs go to the Fish and Game? Mr. MacDonald responded the Proposed Plan phase would be when the ARARs come into play and for the Island Operable Unit the request for ARARs has not been made.

Question: Have there been any detection of contaminants or issues identified as a result of the groundwater sampling?

Statement: The Winchester and Malaga water supply wells have had the same concentrations since 1997, with low levels of perchlorate.

Paul Schubert: The largest issue is replacement water with all the other regulatory issues involved.

8. Tentative 2013 Meeting Dates – Action Items

The next Aerojet CAG meeting is scheduled for January 15, 2014. Tentative dates for 2014 are shown below:

Next meeting date: January 15, 2014

- Tentative meeting date: March 19, 2014